

EUROPEAN PATENT OFFICE

Patent Abstracts of Japan

PUBLICATION NUMBER : 2002365735
PUBLICATION DATE : 18-12-02

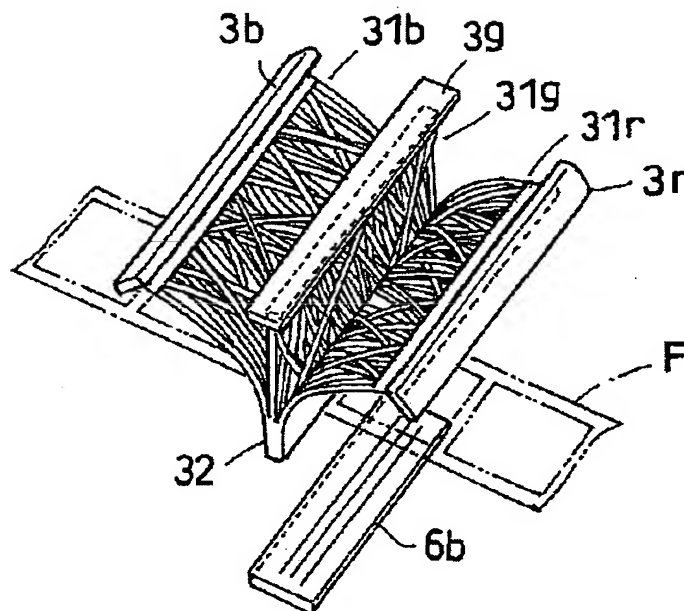
APPLICATION DATE : 08-06-01
APPLICATION NUMBER : 2001173439

APPLICANT : NORITSU KOKI CO LTD;

INVENTOR : MORIMOTO KEIJI;

INT.CL. : G03B 27/32 G02B 6/04 H04N 1/04

TITLE : PHOTOGRAPHIC FILM READER



ABSTRACT : **PROBLEM TO BE SOLVED:** To provide a photographic film reader which is capable of introducing such light as to make a light quantity distribution as uniform as possible to the photographic film when the image of the photographic film is read by using LED light sources.

SOLUTION: This photographic film reader has the LED light sources 3r, 3g and 3b, optical fiber groups 31r, 31g and 31b which guide the light emitted by the LED light sources 3 to optical fiber groups 30r, 30g and 30b, introducing section 31r, 31g and 31b which are disposed at the optical fiber groups 30r, 30g and 30b and are introduced with the light from the LED light sources 3r, 3g and 3b, a leading-out section 32 which is disposed at the optical fiber groups 30r, 30g and 30b and leads the introduced light out toward the photographic film surface and a CCD line sensor 6 which receives the light transmitted through the photographic film surface. The optical fiber groups 30r, 30g and 30b are thermally fused and integrated in the introducing section 31r, 31g and 31b and/or the leading-out section 32.

COPYRIGHT: (C)2003,JPO